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117A  
977

# AVERAGE ANNUAL PRECIPITATION MONTANA

based on 1941-1970 base period



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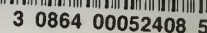
Prepared by

U.S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE  
Bozeman, Montana

In cooperation with

MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION  
WATER RESOURCES DIVISION  
Helena, Montana

S 551.48 U17anp 1977 c.1  
Average annual precipitation, Montana : b



Jan 12	1983	
APR 2	1906	
DEC 4	2001	
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## INTRODUCTION

The Soil Conservation Service assists farmers, ranchers, and other groups in management of land and water resources. Precipitation occurring in a given area greatly influences the vegetation, erosion, runoff and many other factors. Good precipitation data is needed to adequately assess management alternatives, determine water yields and peak flows, and evaluate many other environmental factors.

Maps of precipitation, previously available have been based only on valley precipitation data and have been severely in error in the more mountainous areas.

The Snow Survey Unit has developed procedures for estimating precipitation in mountainous areas using snow course data. These data were combined with mountain storage precipitation gage data obtained by the SCS, National Weather Service, Forest Service and others and data from National Weather Service climatological stations to obtain a realistic estimate of average annual precipitation for all areas in Montana.

Should specific or very accurate precipitation data be required, it is recommended that standard precipitation gages be installed.

Information shown on the maps is based on the 30-year period, 1941-1970. Data for sites with shorter periods of record have been correlated with nearby locations having full 30-years of records to obtain an estimate for the 1941-1970 period. Isohyetal (areas with equal precipitation) lines have been determined between data points using elevation, terrain and soils information. The following maps are on scale of 1:1,000,000. Original development of isohyetal lines was done on Army map service quadrangle sheets, scale of 1:250,000

and reduced to this smaller scale.

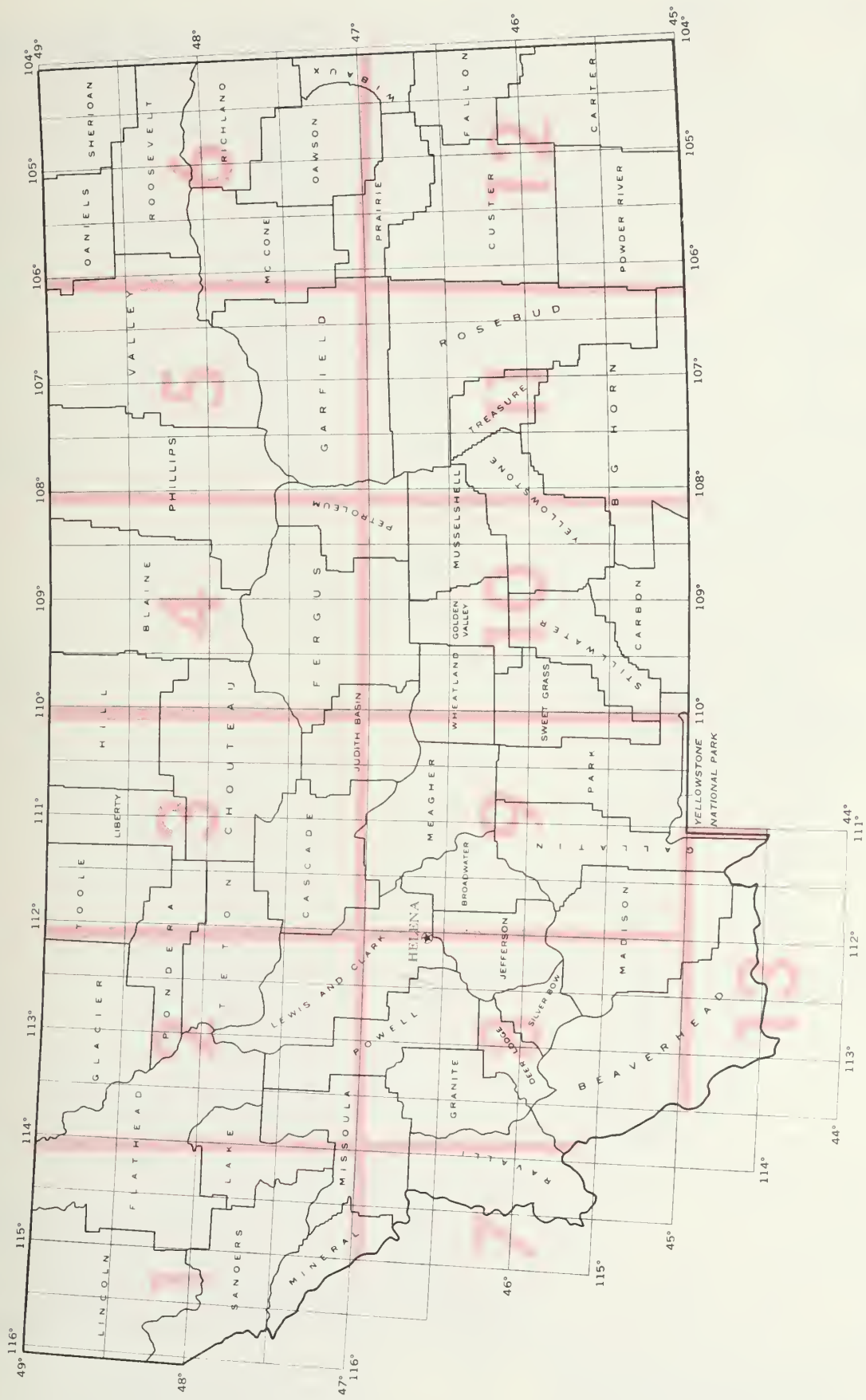
Specific information on procedures used to determine mountain precipitation or to develop these maps is available from the Soil Conservation Service, P. O. Box 970, Bozeman, Montana 59715.

Report prepared by

U. S. Department of Agriculture  
Soil Conservation Service  
P. O. Box 970  
Bozeman, Montana 59715

in cooperation with

Montana Department of Natural Resources and Conservation  
Water Resources Division  
32 South Ewing  
Helena, Montana 59601



# DIRECTORY OF PRECIPITATION SHEETS



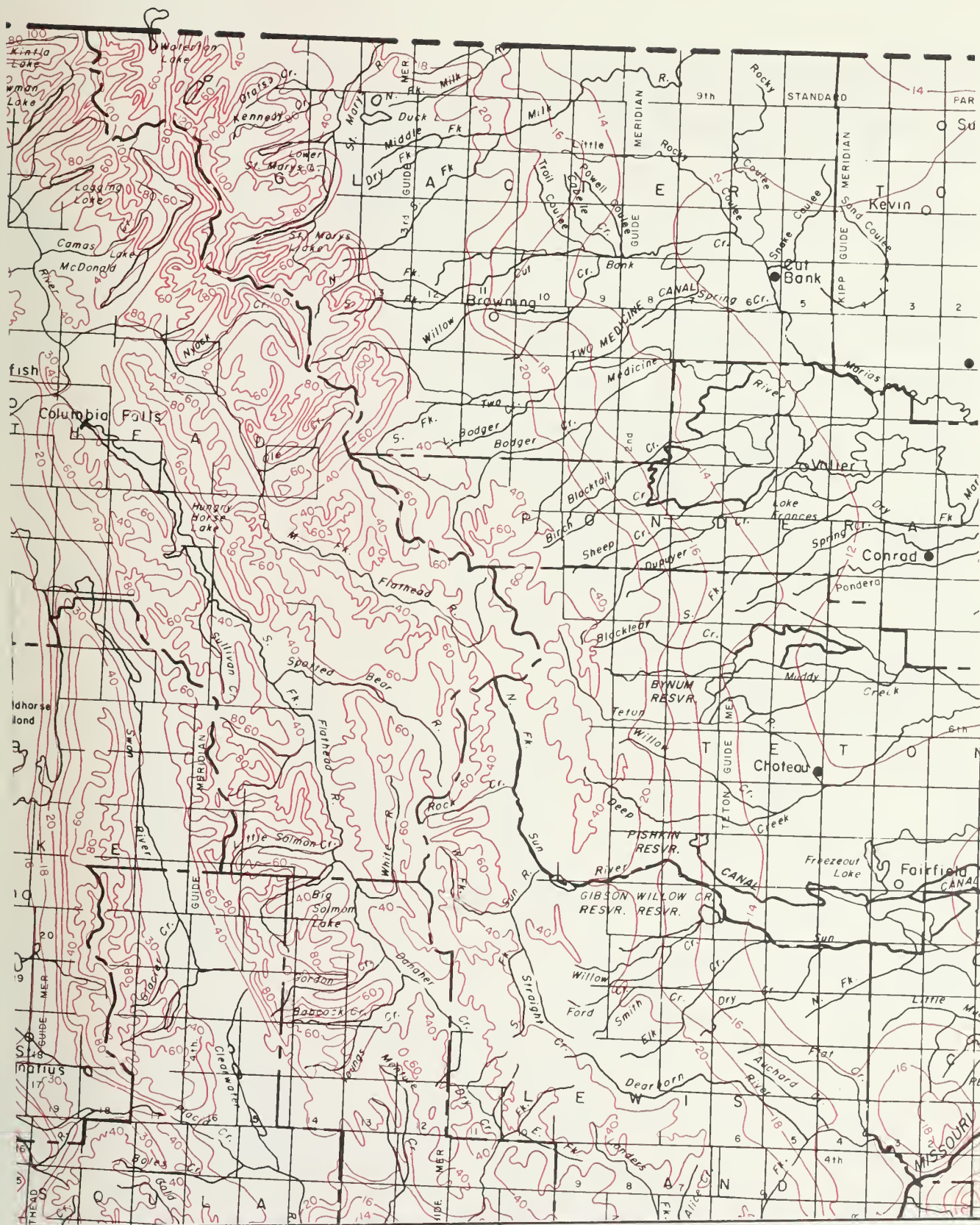


Prepared by USDA Soil Conservation Service in cooperation with Montana Department of Natural Resources and Conservation, Water Resources Division.

Scale: 1 inch equals approx. 16 miles  
 STATE OF MONTANA  
 AVERAGE ANNUAL PRECIPITATION  
 IN INCHES  
 1941 - 70 Base

SHEET 1

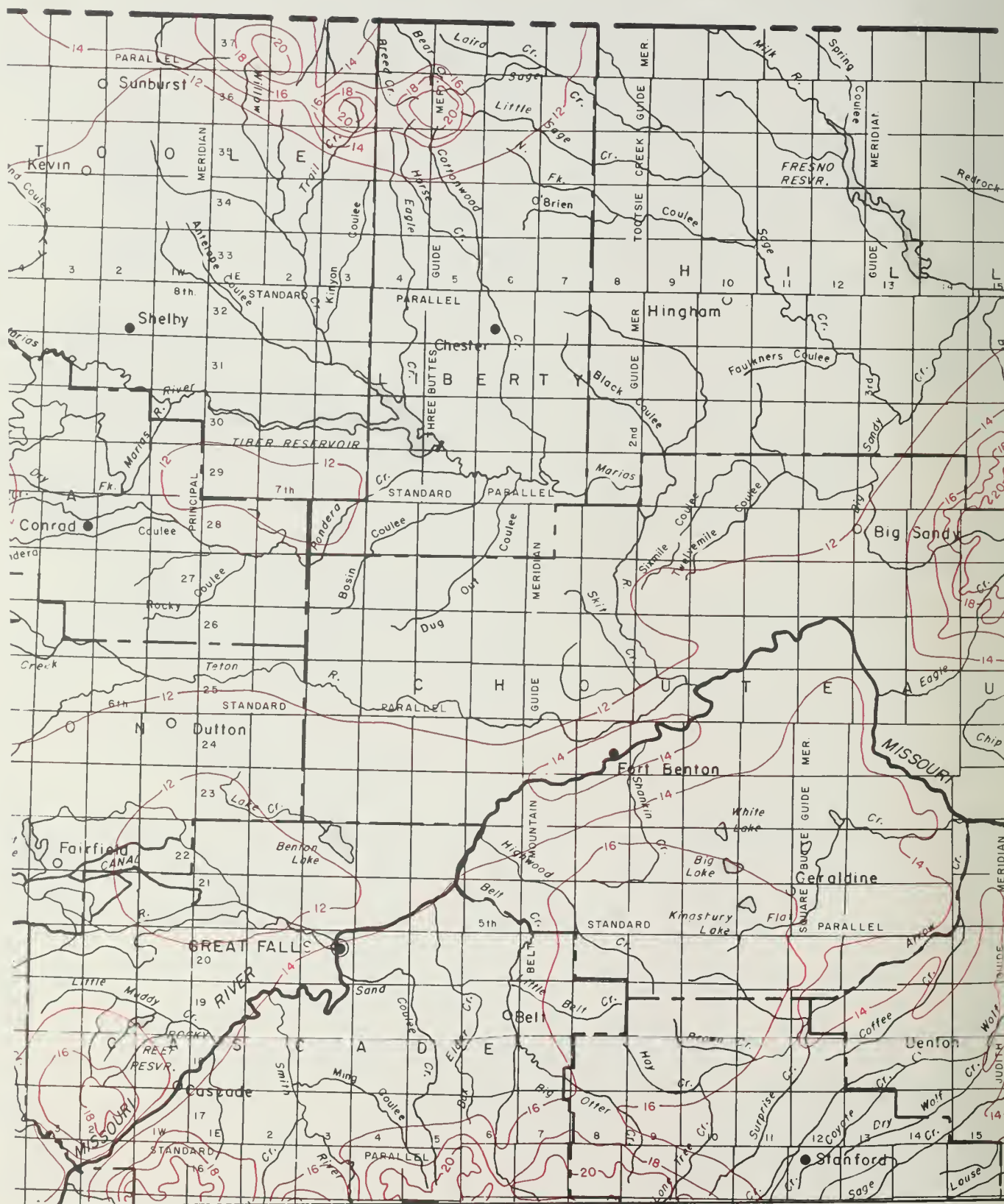




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SHEET 2

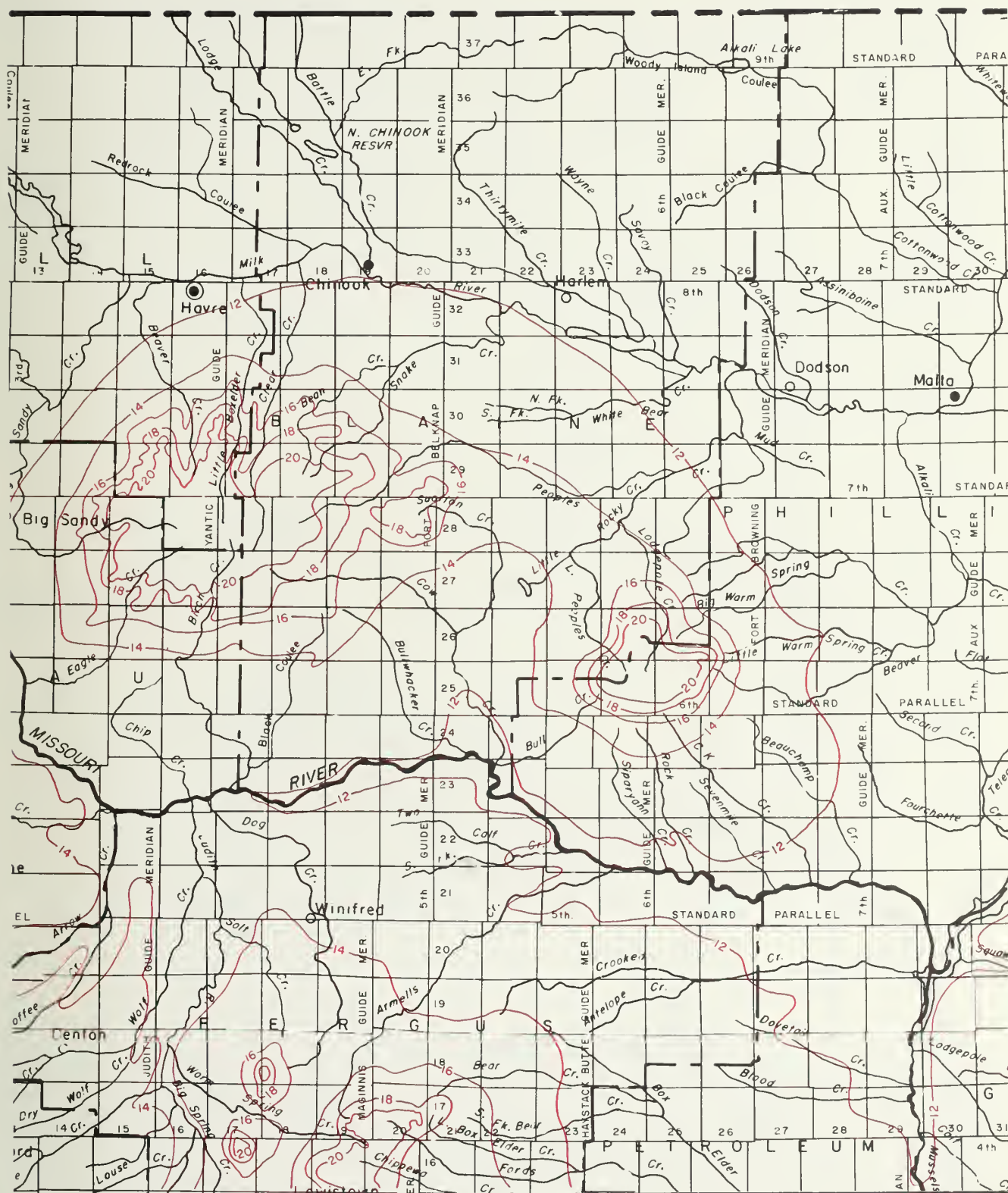


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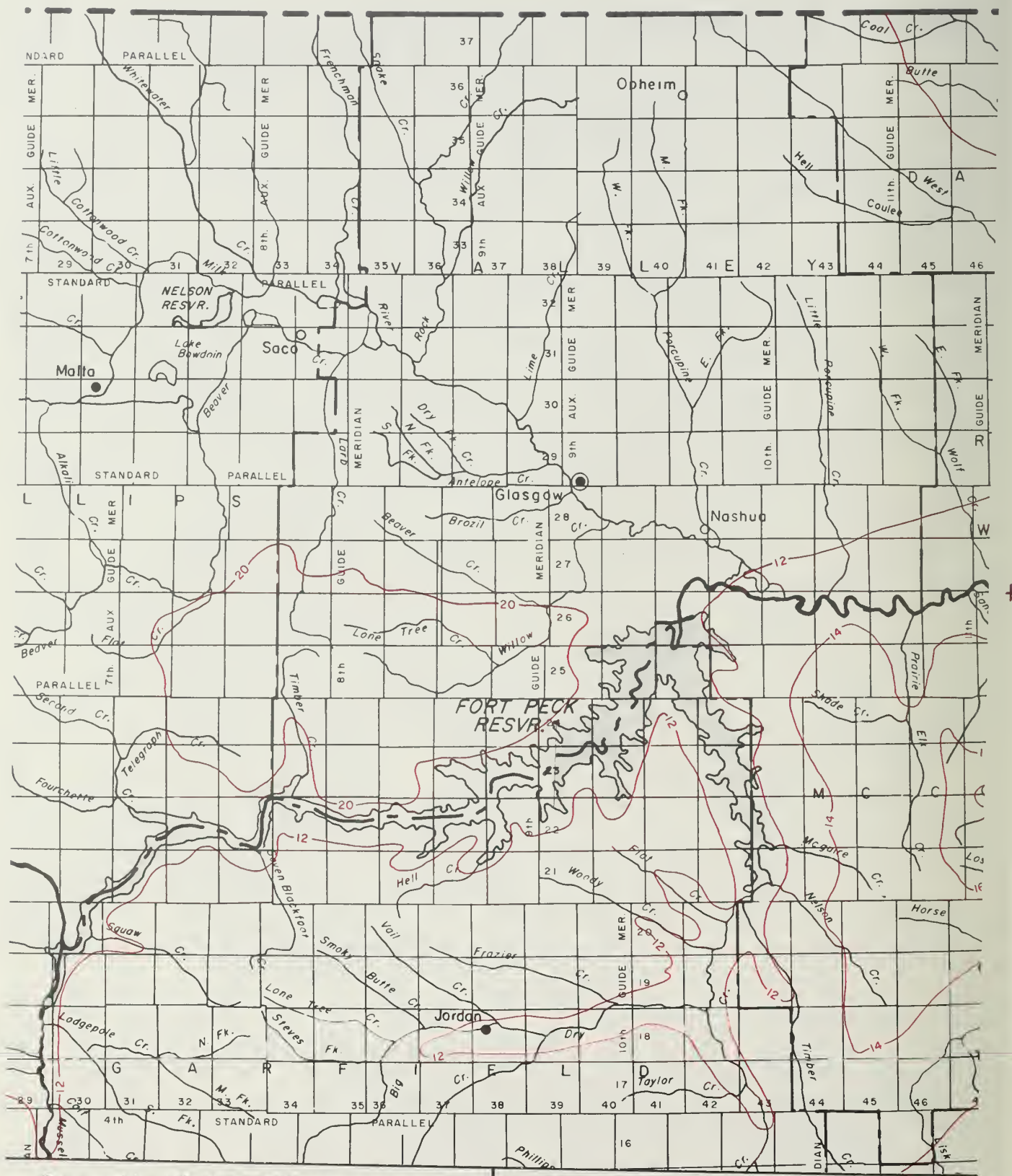


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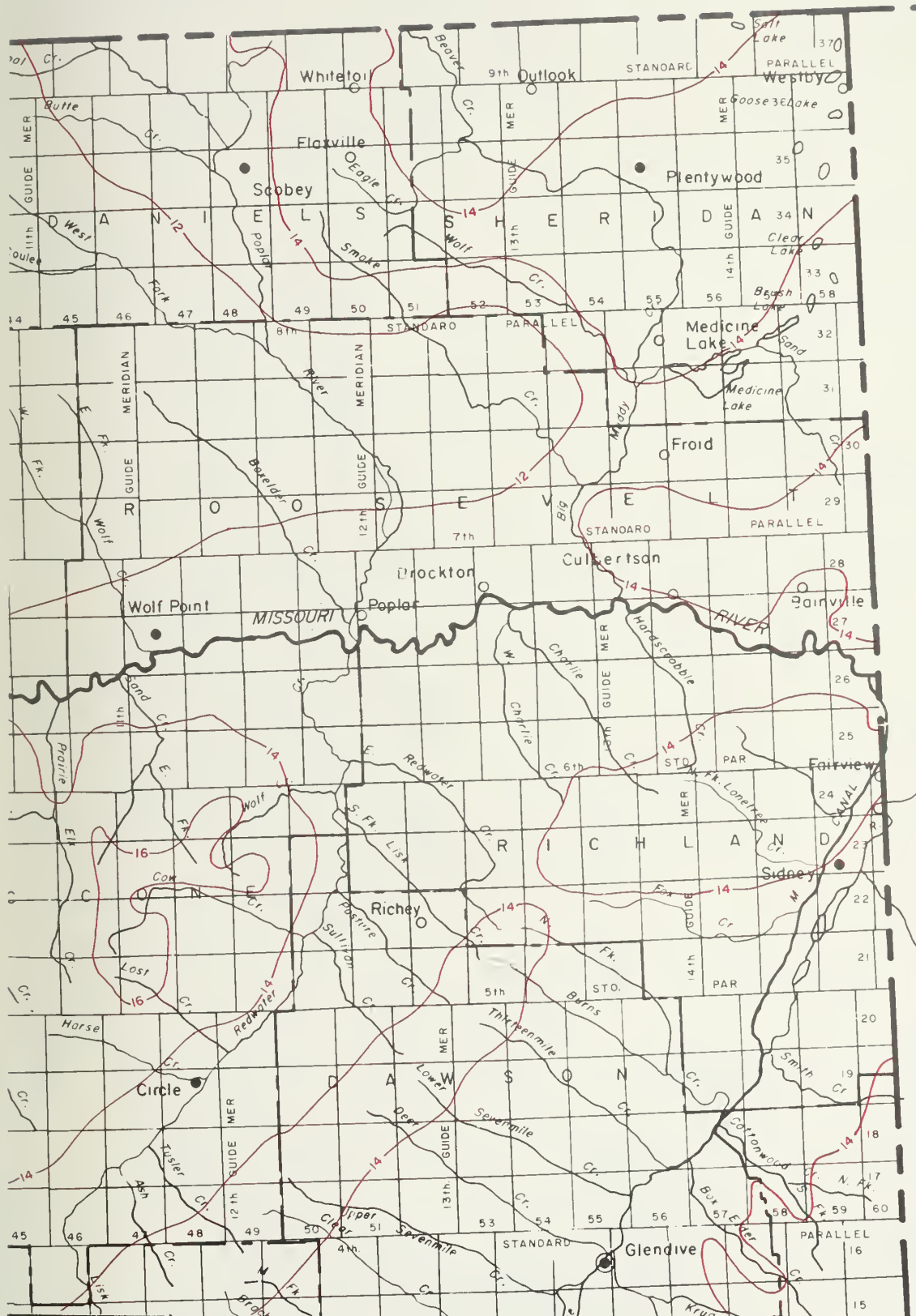


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SHEET 5





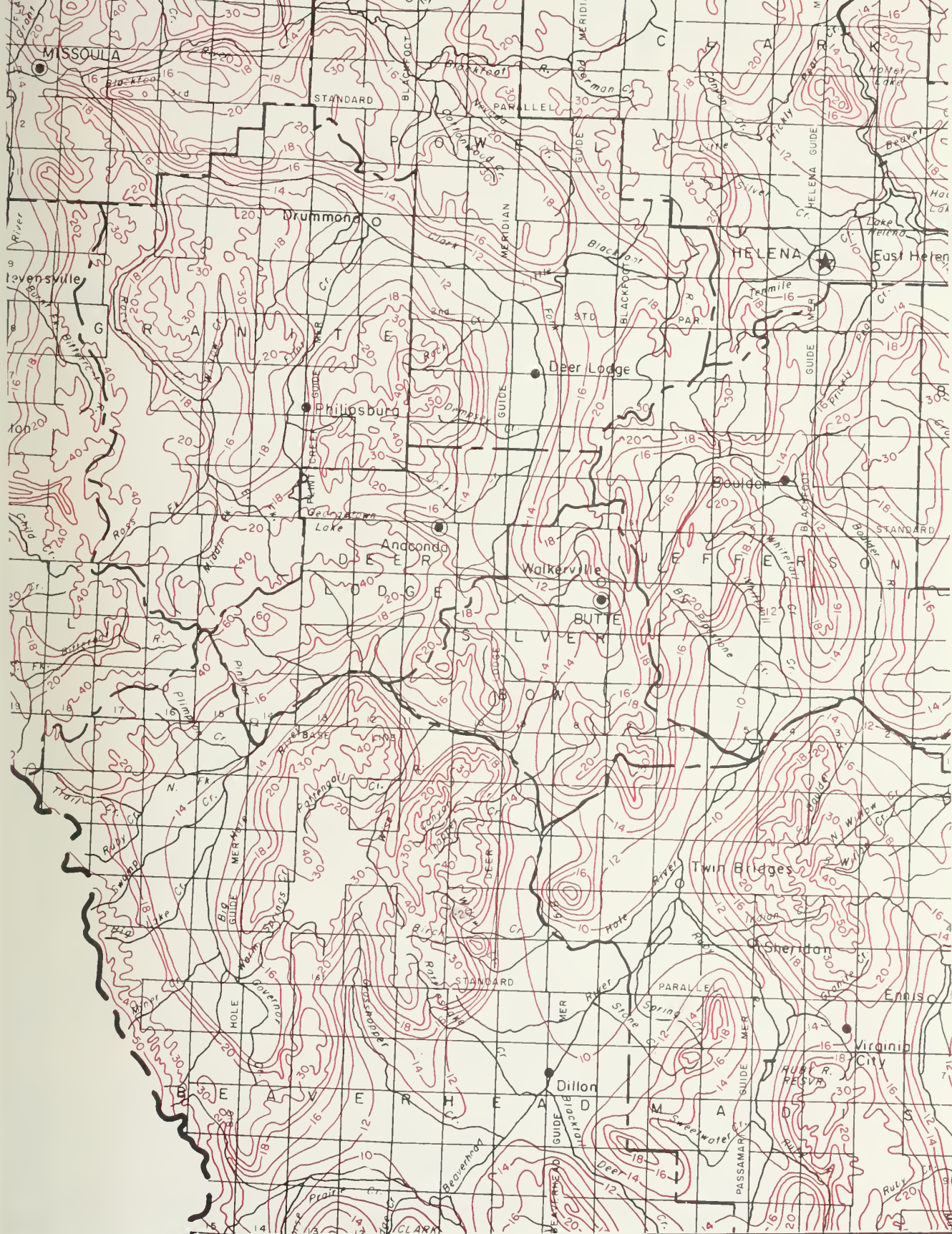
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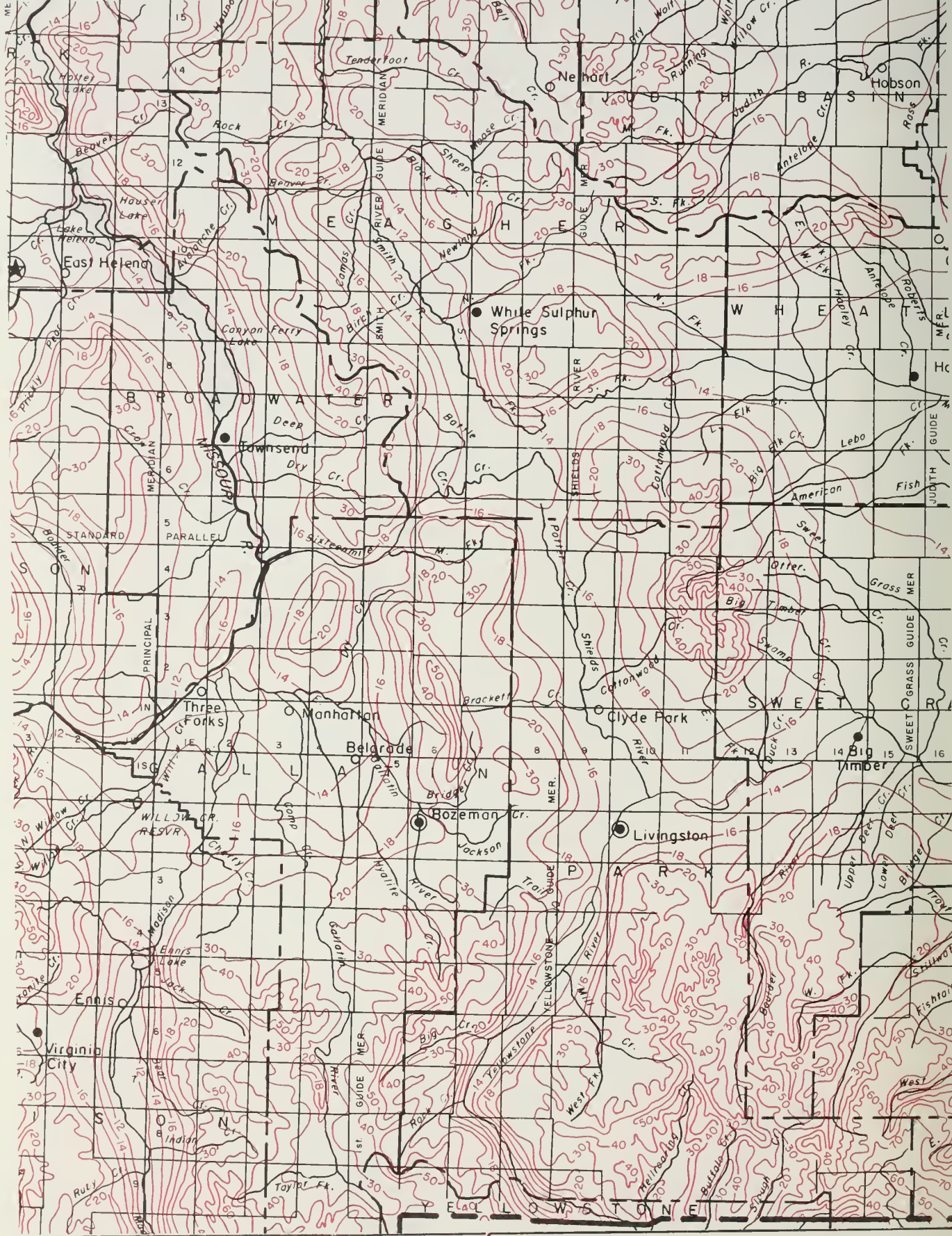


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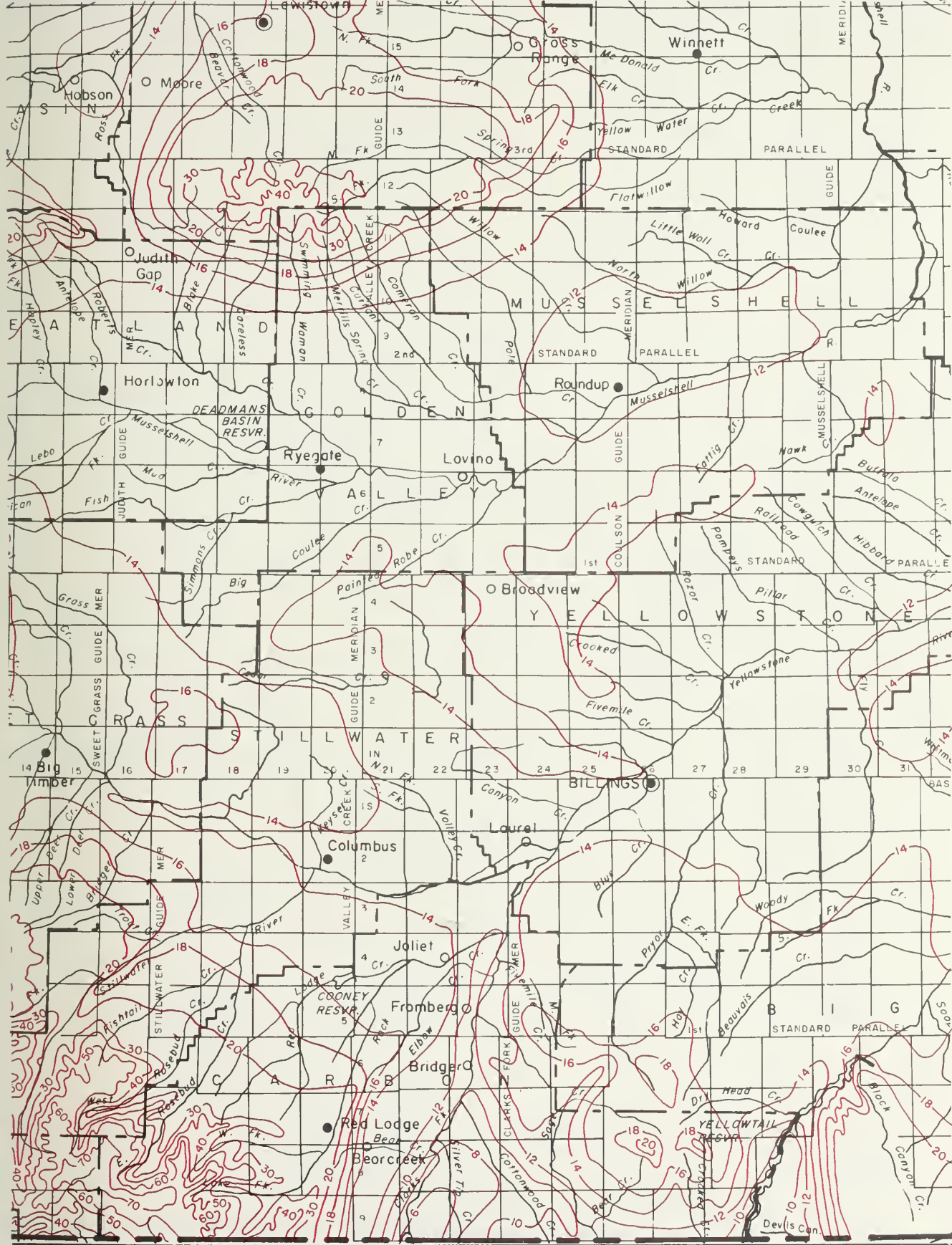
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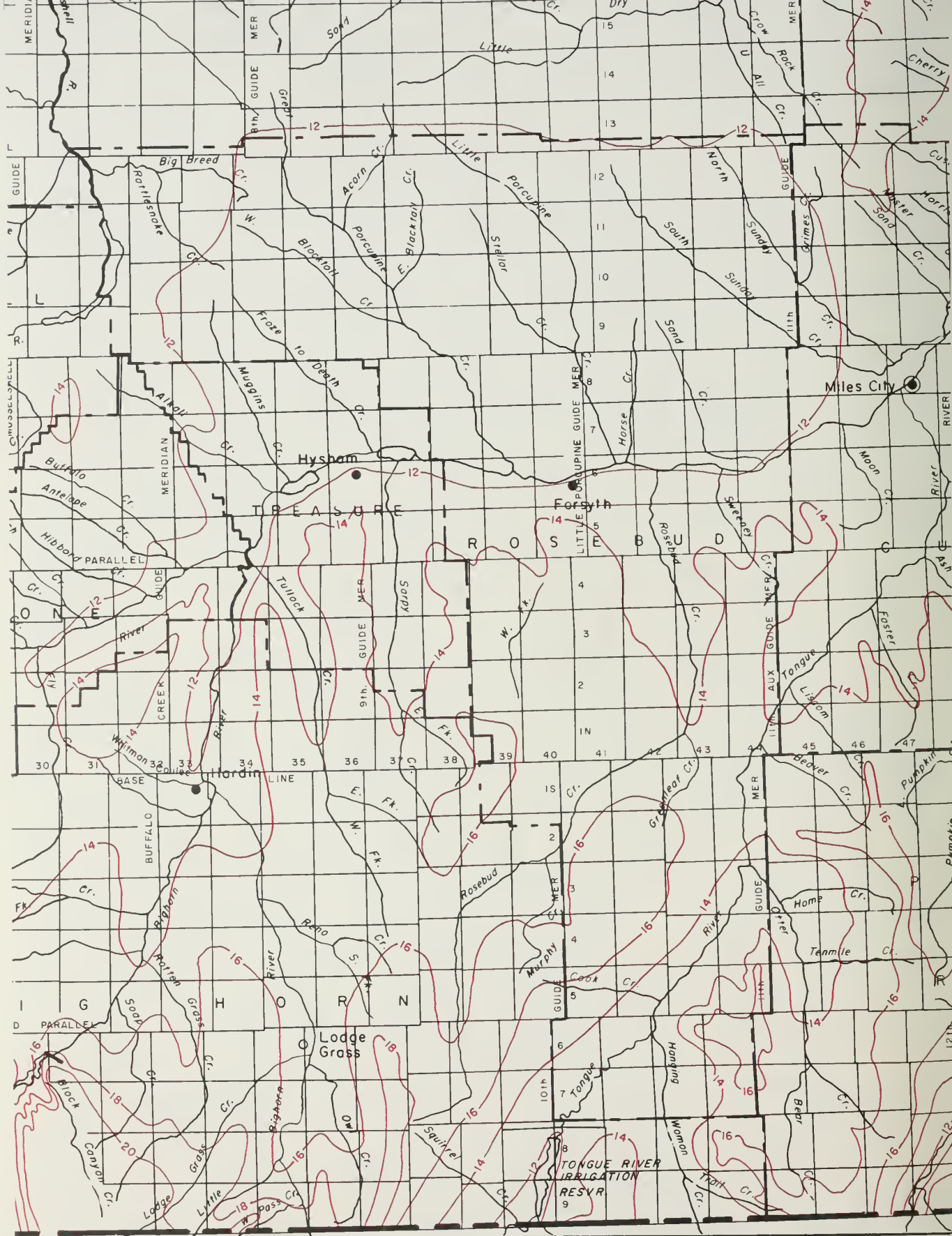
SHEET 9





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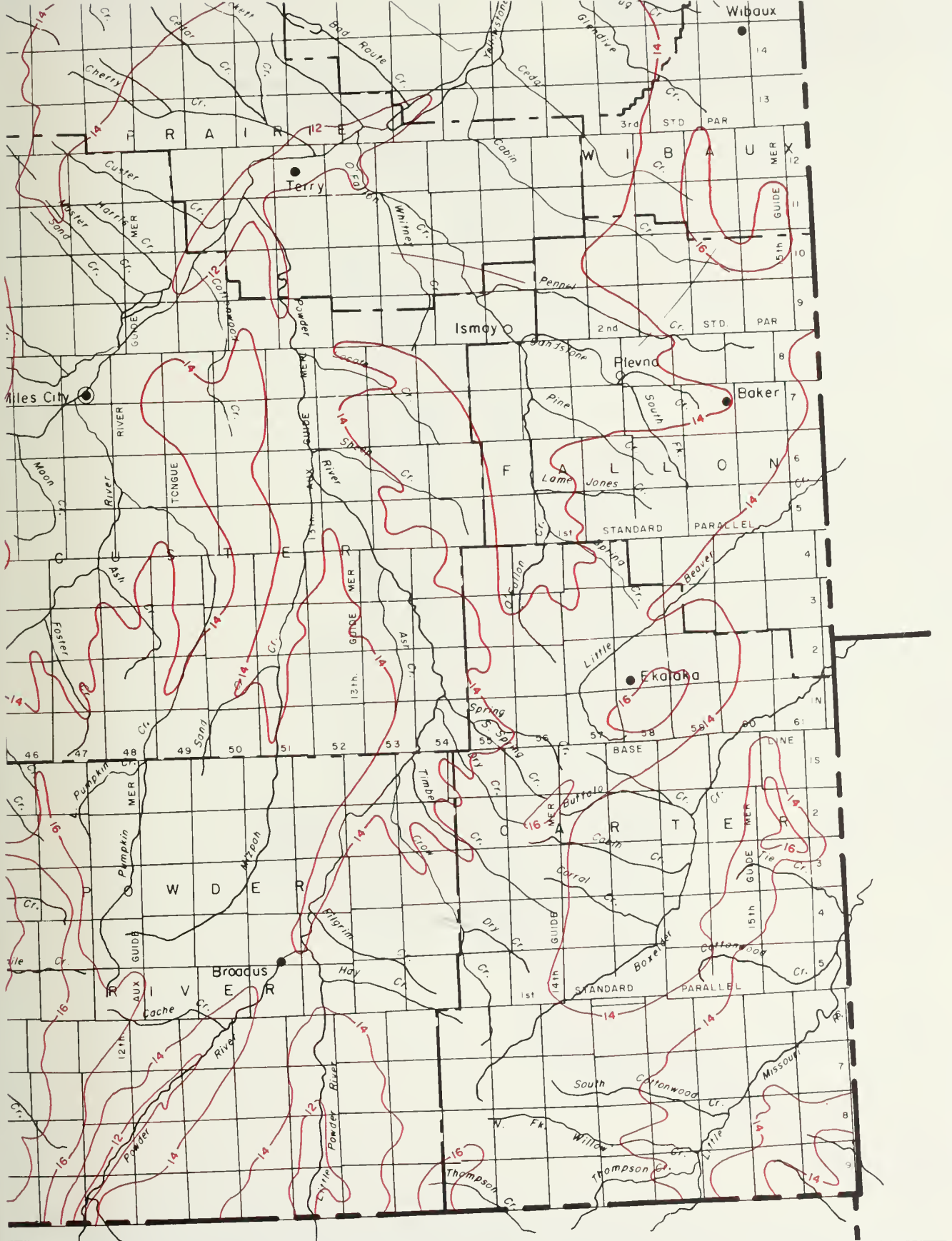


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